circumstances, it may scarcely be regarded with well-founded hopes of realization—there is undoubtedly no more worthy single service to be rendered students in systematic pteridology than the publication of precisely such a work as Christensen has undertaken in his 'Index Filicum.' The need of the work is undeniable; the parts already published are of high worth; the manuscript of the remainder is ready for the printer; and we can only express our hope that the necessary support shall be given—and at once—to insure the issuance of the remaining parts.

WILLIAM R. MAXON.

U. S. NATIONAL MUSEUM,
August 15, 1905.

SCIENTIFIC JOURNALS AND ARTICLES.

THE August number of *The Physical Review* contains the following articles:

A. DE FOREST PALMER: 'Thermo-electric Determination of Temperatures 0° and 200° C.'

LOUIS BEVIER, JR.: 'The Vowel A° (as in Raw), O (as in Rope), U (as in Rude).'

WM. J. RAYMOND: 'The Measurment of Inductance and Capacity by Means of the Differential Ballistic Galvanometer.'

J. B. WHITEHEAD: 'The Magnetic Effect of Electric Displacement.'

E. R. DREW: 'The Infra-red Spectrum of CO_2 and Nitrogen.'

THE contents of *The American Naturalist* for August are as follows:

PROFESSOR D. P. PENHALLOW: 'A Systematic Study of the Salicaceæ.'

J. A. CUSHMAN: 'Developmental Stages in the Lagenidæ.'

DR. B. M. DAVIS: 'Studies on the Plant Cell.'—VII.

Notes and Literature: Nature Study; Zoology, Wasps Social and Solitary, Trouessart's Catalogue Mammalium, Supplement.

SOCIETIES AND ACADEMIES.

ORGANIZATION OF A NATIONAL SOCIETY OF TEACHERS OF MATHEMATICS AND SCIENCE.

A CONFERENCE was held at Asbury Park on July 5, 1905, for the purpose of discussing the advisability of organizing a national society of teachers of mathematics and natural science. The conference was attended by thirty-seven teachers representing nearly all the larger associations of teachers of mathematics and natural science in the United States. Many letters received from teachers who were unable to be present expressed sympathy with the proposed movement.

Professor Thomas S. Fiske, of Columbia University, was elected chairman of the conference and Dr. Arthur Schultze, of the High School of Commerce of New York, was elected secretary.

There was absolute agreement in regard to the advisability of forming closer permanent relations among the associations represented, and a large majority were in favor of effecting this by means of a national association. Considerable discussion, however, arose as to whether the new society should be one of mathematical teachers only or one including also teachers of science. The western associations, for the most part including teachers of science as well as teachers of mathematics, strongly advocated a mixed organization, while the teachers from the eastern states seemed, to a considerable extent, to favor a purely mathematical society. The views urged by the western delegates prevailed, and on motion of Professor E. R. Hedrick, of the University of Missouri, a resolution was adopted to the effect that a national society of teachers of mathematics and science be organized.

The details of the organization were referred to the following executive committee: Professor Thomas S. Fiske (chairman), New York, N. Y.; Professor C. E. Comstock, Peoria, Ill.; Professor E. R. Hedrick, Columbia, Mo.; Mr. Franklin T. Jones, Cleveland, O.; Professor William H. Metzler, Syracuse, N. Y.; Mr. Edgar H. Nichols, Cambridge, Mass.

Up to the next meeting this committee is to act as council of the society and a report of its proceedings is to be published in *School Science and Mathematics*.

In the following list of associations represented at the conference the names of regularly appointed delegates are distinguished by the letter (D).

New England Mathematics Teachers Asso-

ciation.—Chas. E. Bouton, Harvard University (D); Paul Capron (D); Mr. Nichols, Brown and Nichols School, Cambridge (D).

Association of Teachers of Mathematics in the Middle States and Maryland.—John C. Bechtel; Fletcher Durell, Lawrenceville, N. J.; A. Newton Ebaugh; Miss Susan C. Lodge; Donald C. MacLaren; Wm. H. Metzler, Syracuse University (D); J. T. Rorer, Central High School, Philadelphia (D); Arthur Schultze, High School of Commerce, N. Y. (D); H. C. Whitaker.

Central Association of Science and Mathematics Teachers.—Otis W. Caldwell; Jos. V. Collins (D); C. E. Comstock (D); G. W. Greenwood (D); Charles H. Smith; Charles M. Turton; J. W. Young, Charles W. Wright.

Missouri Society of Teachers of Mathematics.—F. T. Appleby; J. S. Bryan, Central High School, St. Louis (D); H. Clay Harvey (D); E. R. Hedrick (D); B. F. Johnston; John R. Kirk; J. W. Whiteye.

Chicago and Cook County High School Teachers' Association.—Edward E. Hill (D); Fred R. Nichols (D); Chas. M. Turton (D).

Mathematical Section of Michigan School-Master's Club.—Miss Emma C. Ackermann (D).

New York State Science Association, Mathematical Department.—Glenn M. Lee.

North Eastern Ohio Center, G.A.S. and M.T.—Lemar T. Beman, Cleveland High School (D); Charles A. Marple (D).

Ohio Association of Teachers of Mathematics and Science.—Franklin T. Jones (D); Wm. McLair (D).

St. Louis Association of Science and Mathematics Teachers.—Wm. Schuyler, McKinley High School, St. Louis (D).

DISCUSSION AND CORRESPONDENCE.

THE BOLYAI PRIZE.

America will rejoice that at last Hungary is honoring herself in honoring her wonder-child, John Bolyai. His marvel diamond, the most extraordinary two dozen pages in the history of human thought, appeared in America in English before it appeared in Hungary in Magyar, proud as they are of their language; and more, the American was reproduced entire in Japan before even the original was reproduced in Hungary.

An American, not a European, was the first from outside Hungary to make the journey to Máros-Vásarhely only for John Bolyai's sake and to see there the letter in Magyar which constitutes his preemption claim and title-deed to the new universe, and to publish for the first time that letter making the date 1823 ever memorable. On its publication thus in America Charles S. Peirce wrote in *The Nation,* March 17, 1892, p. 212 in a review of Halsted's Bolyai:

> There is a winningly enthusiastic letter from Bolyai János to his father, telling him of the great step. He says: "I have discovered such magnificent things that I am myself astonished at them. It would be damage eternal if they were lost. When you see them, my father, you will yourself acknowledge it. At present I can not say more than that from nothing I have created a wholly new world."

Ten years later this letter was published in Hungary in Magyar and Latin, and now comes the establishment of the great Bolyai prize (Prix Bolyai) by the Hungarian Academy of Sciences, of which the statutes are as follows:

> 1. On the occasion of the hundredth anniversary of the birth of John Bolyai the Hungarian Academy of Sciences wishing to perpetuate the memory of this illustrious scientist, as likewise that of the profound thinker, Farkas Bolyai, his father and teacher, has decided to establish a prize to be called the Bolyai Prize. This prize, which is to consist of a commemorative medal—whose obverse will represent the academy with the view of Budapest, and whose reverse will bear an inscription—and of a sum of ten thousand crowns, shall be adjudged for the first time in 1905, then every five years, to the author of the best work in mathematics published during the five preceding years.
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> The prize may be given to any work deemed worthy of it, whatever the language in which it be written, and in whatever form it be published.
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> The announcement of the winner will take place during the general meeting of the academy in December.
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> 2. In case the work of a deceased author be deemed worthy the prize, this shall be given to his heirs.
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> 3. The third section of the academy, section of